

**Abstract of the Disclosure**

A method and apparatus for optically clocked optoelectronic track and hold ("OCOETH") device. The OCOETH device includes a diode bridge, input node, at least two current sources and at least two photodetectors. The input node is operatively coupled to the diode bridge and can receive an analog input signal. The at least two current sources are operatively coupled to the diode bridge and can forward bias the diode bridge. The at least two photodetectors are operatively coupled to the diode bridge and can receive an optical input clocking signal, and can reverse bias and forward bias the diode bridge in response to the optical input clocking signal. The hold capacitor is operatively coupled to the diode bridge and can track the analog input signal when the diode bridge is forward biased, and can hold the analog input signal when the diode bridge switches from forward biased to reverse biased.